

City of Austin

Recommendation for Action

File #: 25-2357, Agenda Item #: 54.

11/20/2025

Posting Language

Approve execution of a collaboration agreement with stakeholders related to field testing for an Aquifer Storage & Recovery project in Bastrop County. Funding: This item has no fiscal impact. Should the project move forward, the future financial impact will be determined as specific funding needs are presented to City Council in alignment with Austin Water's 5-year Capital Improvement Plan.

Lead Department

Austin Water.

Fiscal Note

This item has no fiscal impact. Should the project move forward, the future financial impact will be determined as specific funding needs are presented to City Council in alignment with Austin Water's 5-year Capital Improvement Plan.

Prior Council Action:

November 21, 2024 - Council approved the updated Water Forward Plan.

August 27, 2020 - Council approved a contract with HDR Engineering, Inc. for engineering services for an Aquifer Storage and Recovery Pilot and Program Management in an amount not to exceed \$6,000,000.

November 29, 2018 - Council approved the Water Forward Plan.

For More Information:

Vicky Addie, Austin Water Program Coordinator, at 512-972-0332 or Vicky.addie@austintexas.gov.

Council Committee, Boards and Commission Action:

November 12, 2025 - To be reviewed by the Water and Wastewater Commission.

Additional Backup Information:

This action is to enter into a collaboration agreement with stakeholders related to Aquifer Storage & Recovery (ASR) field testing in Bastrop County.

After extensive scientific study through a desktop analysis phase that began in 2022, Austin Water identified a portion of the Carrizo-Wilcox aquifer in Bastrop County as a location to conduct exploratory field testing for an ASR project. The location was identified based on favorable geotechnical characteristics of the aquifer that provide the potential ability to safely store and retrieve large quantities of water.

ASR is one of several water supply strategies in the Water Forward Plan, Austin's 100-year water plan. The proposed project would store drinking water supply, which is sourced from the Colorado River and Highland Lakes upstream of Austin and treated at one of three water treatment plants. During times of water availability, water would be piped to the ASR project location to be stored deep underground. Before being stored in the aquifer, the water would be further treated to be compatible with native groundwater. When stored water is

needed, it would be pumped back to Austin Water's system.

A Bastrop County ASR stakeholder group was formed in April 2025. Nine stakeholder meetings were held through September 30, 2025. These meetings led to the development of the proposed collaboration agreement, with extensive input from the entities listed below. As requested by Bastrop County stakeholders, the collaboration agreement is a binding contract that creates a framework for Austin Water and stakeholders to work together.

The intent of the collaboration agreement is to formalize Austin's commitments to provide protections and benefits for the Bastrop County community and to formalize a partnership approach for conducting an approximately three-year field-testing phase that tests water quality in a laboratory setting. Key provisions of the agreement include robust testing protocols, data transparency and public reporting, the formation of a technical advisory group, and other community engagement and oversight mechanisms. The City also commits to not use eminent domain to acquire property in Bastrop County for this project and affirms that Austin Water will not apply for a permit to export groundwater from the aquifer, which is consistent with Austin's Water Forward Plan.

During this field-testing phase, no water will be injected into the aquifer. In a laboratory setting, Austin Water will analyze the quality of the groundwater, geology and chemistry of aquifer core samples, and potential interactions between the groundwater, aquifer core samples, or Austin's drinking water.

To seek additional public awareness and community engagement, Austin Water engaged with nearly 300 Bastrop County residents during open houses and office hours held in Bastrop, Elgin, Smithville, and Paige in September 2025, as well as an online survey. The specific feedback received during this public engagement process is provided in a report as backup for this Council agenda item. The scope of the Phase 1B field testing will focus on developing scientific results to advance understanding of the project and to further respond to community feedback.

The following entities participated in the stakeholder group meetings and have considered the collaboration agreement:

- Agua Water Supply Corporation approved the agreement
- Simsboro Aquifer Water Defense Fund approved the agreement
- Lost Pines Groundwater Conservation District approved the agreement
- Bastrop County Water Control and Improvement District #2 approved the agreement
- Bastrop County Commissioners Court voted to not sign the agreement
- Bastrop City Council did not take action on the agreement
- Smithville City Council delayed action on the agreement

This collaboration agreement provides the framework for the City to begin the Phase 1B field testing phase in Bastrop County, which is anticipated to last 36 to 42 months. This phase will provide data needed to help determine whether this project should move forward to pilot testing.

Subject to City Council approval of this agreement, Austin Water will initiate planning for Phase 1B. Further City Council action will be needed in early 2026 to authorize additional funding for existing consultant contracts and other contracts. Next steps will include real estate negotiations, test well design, and well driller procurement, among other tasks.